

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Casey, William**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-026752**Date Inspected:** 23-Nov-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site**CWI Name:** Pat Swain**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Sections**Summary of Items Observed:**

This Quality Assurance (QA) Inspector, Craig Hager was on site at the job site between the times noted above.

This QA Inspector was on site to randomly observe Quality Control (QC) personnel perform Non-Destructive Testing (NDT) and monitor American Bridge/Fluor (ABF) welding operations. This Quality Assurance (QA) Inspector, Craig Hager observed the following.

SAS – Tower – F.W. Spencer:

This QA Inspector was informed by F.W. Spencer foreman Hector Garcia that welding would not be performed this date and that a new person would be on site to perform welding after the Holiday break. Hector Garcia also stated that F.W. Spencer had submitted the certification papers to ABF for him, Damian Llanos.

Orthotropic Bridge Girder (OBG) section:

13W/14W – weld joints H and I (SPCM): This QA Inspector observed ABF welding personnel Richard Garcia (#5892) working at this location between the bolted stiffeners to remove the backing bar by using the carbon arc process and grinding. Work at this location was not completed this date.

12W/13W-Longitudinal Stiffener (LS) – LS-5: This QA Inspector was informed the excavation of a second time repair (R-2) would be started this date. This QA Inspector observed ABF welding personnel Fred Kaddu (#2188) using the carbon arc process to excavate the defect found during Ultrasonic Testing (UT). This QA Inspector observed the excavation area after carbon arcing and grinding to remove any carbon deposits. This QA Inspector

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observed QC Inspector Pat Swain perform a visual inspection and Magnetic Particle Testing (MT) on the excavation area and marked a short area that appeared to be slag trapped in the weld metal. This QA Inspector observed ABF welding personnel Fred Kaddu (#2188) continue with grinding the area. The grinding at this location was not completed this date therefore welding not performed this date. See photo below.

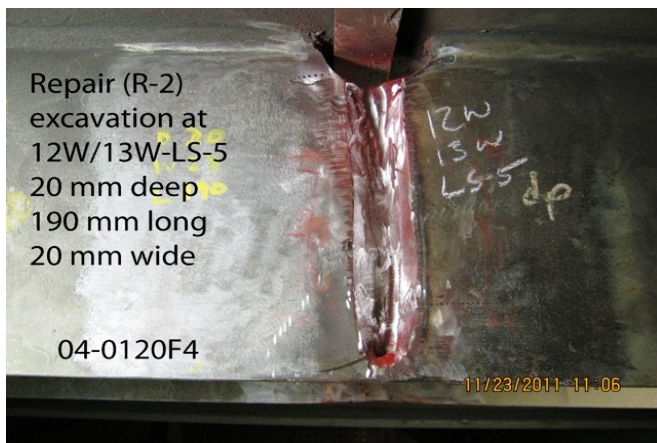
SAS –Tower – Cover Plates:

This QA Inspector was informed by QC Inspector Steve Jensen that he had obtained the approved drawings for the cover plates at the 145 meter elevation. This QA Inspector reviewed the drawings and observed they all appeared to have been stamped approved. This QA Inspector observed each of the four towers (North, South, East and West) were to have a cover plate at each of the 5 corners (A-B, B-C, C-D, D-E and E-A). QC Inspector Steve Jensen informed this QA Inspector that 18 of the 20 cover plates had been welded by ABF welding personnel Todd Jackson (#4639) and except for the 2 cover plates that were missing because the temporary steel bolted into position block access for their fabrication had been inspected and accepted. This QA Inspector randomly observed as QC Inspector Salvador Merino performed MT on what appeared to be a random section of the weld for a length of at least 10% of the weld length. The MT inspection observed by this QA Inspector appeared to comply with the contract requirements. This QA Inspector observed that 2 of the 18 cover plates appeared to have a Partial Joint Penetration (PJP) weld, this QA Inspector checked the drawing and did not observe a weld symbol had been specified. These 2 plates had a slight angle (approximately 30 degrees according to the drawing) and the drawings implied they were to have been bent rather than welded. This QA Inspector pointed this out to QC Inspector Steve Jensen and he stated he would have ABF look into the issue. See photo below of welded piece.

This QA Inspector verbally informed QA SPCM Lead Inspector, Daniel Reyes, of the issues noted in this report for compliance therefore for further details of issues of significance see QA SPCM Lead Inspector, Daniel Reyes, Daily Inspection Report (6031) for this date.

Summary of Conversations:

This QA Inspector had general conversations with American Bridge/Fluor (ABF) and Caltrans personnel during this shift. Except as described above and noted above there were no notable conversations.



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Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Nina Choy (510) 385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Hager,Craig	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer
